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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,109	07/23/2001	Tatsushi Nashida	450100-03355	4003
20999 7590 12/21/2007 FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			EXAMINER WOZNIAK, JAMES S	
			ART UNIT 2626	PAPER NUMBER
			MAIL DATE 12/21/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/911,109	<b>Applicant(s)</b> NASHIDA ET AL.	
	<b>Examiner</b> James S. Wozniak	<b>Art Unit</b> 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-12,14-26,29-36 and 38-55 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,5-12,14-16,20-26,29-36,38-40,44-48 and 50-55 is/are allowed.
- 6) ☒ Claim(s) 49 is/are rejected.
- 7) ☒ Claim(s) 17-19 and 41-43 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

1. In response to the office action from 7/11/2007, the applicant has submitted a request for continued examination, filed 10/10/2007, amending Claims 1, 25, and 49 to include a specific channel selection means in combination with the other previously presented claim limitations, while arguing to traverse the art rejection based on the amended claims (*Amendment, Pages 23-24*). In response to the amended claims and for the reasons set forth below, claims 1, 25, and 49 overcome the prior art of record. Amended claim 49, however, does not overcome the previous 35 U.S.C. 101 rejection, and thus, this claim and its dependents remain rejected as being directed to non-statutory subject matter.

2. In response to the amended title, the examiner has withdrawn the previous corresponding objection.

### *Response to Arguments*

3. Applicant's arguments have been fully considered but they are not persuasive for the following reasons:

With respect to **Claim 49**, the applicant argues that amended claim 49 obviates the previous 35 U.S.C. 101 rejection. In response, the examiner notes that although amended claim

49 further defines the computer readable medium, these amendments do not overcome the previous 35 U.S.C. 101 rejection because the claim is still defined in terms of the program (i.e., "said program comprising the steps of") rather the method that is performed when the medium storing the program is executed by a computer, thus enabling the process' functionality to be realized (*i.e., --to process an interactive method...the method comprising--*).

Also, upon further reconsideration, it is noted that the claimed computer readable storage medium is still not limited to tangible, and thus, statutory types (*see specification, Pages 15-16*). In the specification, page 15, lines 5-13, the invention embodiment as a computer readable storage medium is introduced and on page 16, lines 6-10, the "computer-readable storage medium" is further defined as being a "transmission medium" (i.e., non-statutory medium) (*"The above storage medium may also technically provide the computer software for a specific computer program system in a computer readable form via transmission medium..."*). It is recommended that claim 49 be amended in a manner which includes only statutory medium types or the specification amended to cancel the non-statutory mediums in order to overcome this aspect of the 35 U.S.C. 101 rejection. For these reasons, claim 49 remains rejected as being directed to non-statutory subject matter.

### ***Claim Objections***

4. **Claims 17-19 and 41-43** are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent

form, or rewrite the claim(s) in independent form. Claims 17 and 41 recite that the type of menu that an assistant presents when a user issues a change channel command is of a matrix style, however independent claims 1 and 25 require that this menu is ring-based and placed around an animated assistant. Thus, since claims 17 and 41 do not further limit this required ring-based menu, claims 17 and 41 are objected as being improper dependent claims. Dependent claims 18-19 and 42-43 further limit this matrix-based menu, and thus, are also objected to as being improper dependent claims.

***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. **Claim 49** is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

**Claim 49** is drawn to a “program” data structure *per se*, because the body of the claim is directed to the program data structure (*see preamble- “said program comprising the steps of”*) and not the method that is performed when the program is executed by a computer (*i.e., --to process an interactive method...the method comprising--*). For this reason, claim 49 is directed to non-statutory subject matter. See MPEP § 2106.IV.B.1.a.

Data structures not claimed as embodied in computer readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in

the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory). Such claimed *data structures* do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention, which permit the data structure's functionality to be realized. In contrast, a claimed computer readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which *permit the data structure's functionality to be realized*, and is thus statutory.

Similarly, computer programs claimed as computer listings *per se*, i.e., the descriptions or expressions of the programs are not physical “things.” They are neither computer components nor statutory processes, as they are not “acts” being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized.

It is also noted that the claimed computer readable storage medium not limited to tangible, and thus, statutory types (*see specification, Pages 15-16*). In the specification, page 15, lines 5-13, the invention embodiment as a computer readable storage medium is introduced and on page 16, lines 6-10, the “computer-readable storage medium” is further defined as being a “transmission medium” (i.e., non-statutory medium) (*“The above storage medium may also technically provide the computer software for a specific computer program system in a computer readable form via transmission medium...”*). It is recommended that claim 49 be amended in a manner which includes only statutory medium types or the specification amended to cancel the non-statutory mediums in order to overcome this aspect of the 35 U.S.C. 101 rejection.

*Allowable Subject Matter*

7. **Claims 1-2, 5-12, 14-16, 20-26, 29-36, 38-40, 44-48, and 50-55** are allowable over the prior art of record.

8. The following is an examiner's statement of reasons for allowance:

With respect to **Claims 1 and 25**, the prior art of record fails to explicitly teach or fairly suggest, either individually or in combination, a system and method for providing an animated interactive assistant for television channel control comprising control means for enabling an assistant to appear on a television display, speech recognition and synthesis means to enable communication understanding between a user and the assistant, lead a user's speech input, and interpret a user's speech input, ambient state generation to enable the animated assistant to urge the user to input commands using the speech recognition means when a user is idle, a connection between the interactive assistant system and a television, a command interpreter for interpreting a user's command intention based on an interaction history, and a change channel command execution to enable a user to change TV channels via speech in combination with a channel change command display interface that places respective changeable broadcasting program display windows in the shape of a ring around said assistant, and a part of the ring has a gap with no broadcasting program display window, and a broadcasting program display window of a program on a temporarily selected channel is placed at the forefront of the ring (*See Fig. 14*).

Pertinent prior art:

Although Trower et al (*U.S. Patent: 5,983,190*) evidences that it is well known in the art to provide a displayed animated assistant that interacts with a user via a speech recognizer/synthesizer (*Fig. 2, Element 60; Col. 6, Line 62- Col. 7, Line 12; Col. 23, Lines 36-60*) and keeps track of an interaction content to provide a list of available commands (*Col. 27, Line 5- Col. 28, Line 29*), Trower fails to explicitly teach or fairly suggest ambient state generation, leading prompts, channel selection commands, or a change channel display interface as set forth in the presently amended claims.

Although Kawamoto et al (*U.S. Patent: 5,367,454*) cures a deficiency in the teachings of Trower by evidencing that generating ambient states for an interactive assistant is well known in the art (*Col. 4, Lines 21-34; and Col. 5, Line 60- Col. 6, Line 18*), Kawamoto fails to explicitly teach or fairly suggest the change channel display interface as set forth in the presently amended independent claims in combination with the other claimed elements/steps.

Although Houser et al (*U.S. Patent: 5,77,859*) further discloses the user of speech commands to interactively control television channel selection (*Col. 14, Line 61- Col. 15, Line 27*), Houser fails to explicitly teach or fairly suggest the change channel display interface as set forth in the presently amended independent claims in combination with the other claimed elements/steps.

Although Cherian et al (*U.S. Patent: 6,211,921*) discloses that a ring-shaped menu is well-known for TV function selection (*Fig. 2*) and also discloses the use of an interactive agent (*Fig. 4, Element 401*), Cherian makes no mention that the agent can communicate via speech, that the windows of the ring contain television program displays, or that the agent is situated in



the center of the ring (*Cherian actually features a broadcast program displayed in the middle of the ring, See Fig. 2, PIP*).

Thus, for at least the above reasons, claims 1 and 25 are allowable over the prior art of record.

Dependent claims 2, 5-12, 14-16, 20-24, 26, 29-36, 38-40, 44-48, and 50-55 further limit allowable independent claims, and thus, are also allowable over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

9. **Claim 49** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten to overcome the above 35 U.S.C. 101 rejection.

The following is a statement of reasons for the indication of potentially allowable subject matter:

Claim 49 recites a method similar in scope to that recited in claim 25, implemented as a computer-readable medium encoded with a program, and thus, contains allowable subject matter for similar reasons.

*Conclusion*

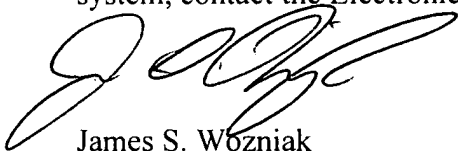
10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Cove et al (*U.S. Patent: 6,266,098*) discloses an interactive menu that is wheel or ring-shaped.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Wozniak whose telephone number is (571) 272-7632. The examiner can normally be reached on M-Th, 7:30-5:00, F, 7:30-4, Off Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached at (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



James S. Wozniak  
12/17/2007